

# **KBU8A THRU KBU8M**

#### SINGLE-PHASE BRIDGE RECTIFIER VOLTAGE RANGE 50 to 1000 Volts CURRENT 8.0 Ampere

## FEATURES

- \* Low cost
- \* High forward surge current capability
- \* Ideal for printed circuit board
- \* High temperature soldering guaranteed: 260°c/10 second,0.375"(9.5mm)lead length at 5 lbs. (2.3kg) tension.

#### **MECHANICAL DATA**

- \* Case: Transfer molded plastic
- \* Epoxy: UL94V-O rate flame retardant
- \* Terminals : Lead Solderable Per MIL-STD-202E method 208C
- \* Polarity : Polarity symbols marked on case
- \* Mounting :Thru hole for #6 screw, 5 in,-lbs.Torqute Max.
- \* Weight: 0.27 ounce, 7.59 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARATERISTICS

- \* Rating at 25 ambient temperature unless otherwise specified
- \* Single phase, half wave. 60Hz, resistive or inductive load.

\* For capacitive load derate current by 20 %

Characteristic			Symbol	KBU8A	KBU8B	KBU8D	KBU8G	KBU8J	KBU8K	KBU8M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage			V <sub>RRM</sub> V <sub>RWM</sub> V <sub>DC</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage			V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectifier Forward Current at	T <sub>C</sub> =100			8.0							А
	T <sub>A</sub> =45	(Note 3)	10(AV)	6.0							
Non-Repetitive Peak Surge Current 8.3 ms Single half sine-wave superimposed on rated load			I <sub>FSM</sub>	300							А
Forward Voltage (per element) (I <sub>F</sub> 8.0 Amp)			$V_{FM}$	1.0							V
Peak Reverse Current at rat DC blocking voltage per eler	ed	T <sub>A</sub> = 25	I <sub>R</sub>	10							uA
	nent	T <sub>A</sub> = 100		1.0							mA
I <sup>2</sup> t Rating for Fusing( t<8.3ms)			l <sup>2</sup> t	373							A <sup>2</sup> s
Typical Junction Capacitance per element (Note1)			CJ	200							pF
Typical Thermal Resistance (per leg)(note 2)				5.0							°C/W
Operating and Storage Temperature Range			T」,T <sub>stg</sub>	-65 to +150							

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Unit mounted on 3.0"×3.0"×0.11" thick (7.5×7.5×0.3 cm ) Al. plate.

3. Unit mounted in free air, no heatsink, P.C.B. at 375"(9.5mm) lead length with. 5"×5"(12×12 mm) copper pads...



### FIG-1 FORWARD CURRENT DERATING CURVE

#### FIG-2 TYPICAL FORWARD CHARACTERISITICS



FORWARD VOLTAGE (Volts)

FIG-3 PEAK FORWARD SURGE CURRENT 350 300 FWD SURGE CURRENT (A) T<sub>J</sub>=25<sup>o</sup>C Single Half 250 -Sine Wave (JEDEC Method) 200 150 100 II<sub>FSM</sub>, PEAK 50 0 10 100 1



FIG-4 TYPICAL JUNCTION CAPACITANCE



NUMBER OF CYCLES AT 60 Hz

**REVERSE VOLTAGE (Volts)** 



FIG-5 TYPICAL REVERSE CHARACTERISTICS

PERCENT OF RATED REVERSE VOLTAGE (%)



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